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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	to be assigned 10/182284
Filing Date	February 18, 2004
First Named Inventor	John Santhoff et al.
Art Unit	to be assigned 2666
Examiner Name	to be assigned Melanie Jagannathan
Attorney Docket Number	048CIP2-121

Sheet 1 of 4

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
mo		US- 3,668,639	06-06-1972	Harmuth	
mo		US- 3,678,204	07-18-1972	Harmuth	
mo		US- 3,728,632	04-17-1973	Ross	
mo		US- 4,641,317	02-03-1987	Fullerton	
mo		US- 4,979,186	12-18-1990	Fullerton	
mo		US- 5,146,616	09-08-1992	Tang et al.	
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mo		US- 5,748,891	05-05-1998	Fleming et al.	
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mo		US- 6,002,708	12-14-1999	Fleming et al.	
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mo		US- 6,505,032 B1	01-07-2003	McCorkle et al.	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>4</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
mo		WO 01/39451 A1	05-31-2001	Multispectral Solutions, Inc		
mo		WO 01/93434 A2	12-06-2001	XtremeSpectrum, Inc		
mo		WO 02/31986 A2	04-18-2002	XtremeSpectrum, Inc		
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Examiner Signature	Melanie Jagannathan	Date Considered	7/9/05
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Sheet 2

of 4

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Application Number	to be assigned 10/782284
Filing Date	February 18, 2004
First Named Inventor	John Santhoff et al.
Art Unit	to be assigned 2666
Examiner Name	to be assigned melanie Jaganathan
Attorney Docket Number	048CIP2-121

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ms		US- 6,026,125	02-15-2000	Larrick et al.	
ms		US- 6,690,741	02-10-2004	Frederick et al.	
ms		US- 2001/0033610 A1	10-25-2001	Chastain	
ms		US- 2002/0197910	07-19-2002	Shvodian, William M.	
ms		US- 2002/0206648	07-26-2002	Shvodian, William M.	
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ms		US- 2004/0028012A1	02-12-2004	Walker et al.	
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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		Filing Date	February 18, 2004
		First Named Inventor	John Santhoff et al.
		Art Unit	to be assigned 2606
		Examiner Name	to be assigned Melanie Tazanne
Sheet 3 of 4	Attorney Docket Number	048CIP2-121	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
ms		DI WU, PREDRAG SPASOJEVIC, IVAN SESKAR, "Multipath Beamforming UWB Signal Design Based on Ternary Sequences", 40th Annual Allerton Conference, August 26, 2002, WINLAB, Rutgers University, Camden, New Jersey, USA.	
ms		HENNING F. HARMUTH, "Applications of Walsh functions in communications", IEEE Spectrum, November 1969, pgs. 82-91, USA.	
ms		ROBERT FLEMING, CHERIE KUSHER, "Integrated, Low-Power, Ultra-Wideband Transceivers for Distributed Position Location and Communication", Semi-Annual Technical Report Contract J-BFI-94-058, Aether Wire & Location, Inc. July 1995, Nicasio, CA, USA.	
ms		ROBERT FLEMING, CHERIE KUSHER, "Low-Power, Miniature, Distributed Position Location and Communication Device Using Ultra-Wideband, Nonsinusoidal Communication Technology", Semi-Annual Technical Report Contract J-BFI-94-058, Aether Wire & Location, Inc. July 1995, Nicasio, CA, USA.	
ms		FERNANDO RAMIREZ-MIRELES, ROBERT A. SCHOLTZ, "N-Orthogonal Time-Shift-Modulated Codes for Impulse Radio", Report from Joint Services Electronics Program Contract F 49620-94-0022, CTMC 1997, IEEE Wireless 98, July 1998, USA.	
ms		FERNANDO RAMIREZ-MIRELES, "On Performance of Ultra Wideband Signals in Gaussian Noise and Dense Multipath", Paper 99C265, Accepted for Publication in the IEEE Transactions on Vehicular Technology, USC Ultralab, USA.	
ms		ROBERT A. SCHOLTZ, P. VIJAY KUMAR, CARLOS J. CORRADA-BRAVO, "Signal Design for Ultra-Wideband Radio", Department of Electrical Engineering, University of Southern California, Los Angeles, CA, USA.	
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ms		HENNING F. HARMUTH, "Frequency-Sharing and Spread-Spectrum Transmission with Large Relative Bandwidth", IEEE Transactions on Electromagnetic Compatibility, Vol. EMC-20, No. 1, February 1978, USA.	

Examiner Signature	Melanie Tazanne	Date Considered	7/9/05
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		Examiner Name	to be assigned Melane Jayanthan
Sheet 4	of 4	Attorney Docket Number	048CIP2-121

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
ms		MULTISPECTRAL SOLUTIONS, INC., Revision of Part 15 of the Commission's Rules Regarding Ultra-Wideband Transmission Systems* September 12, 2000.	
ms		ANNA SCAGLIONE, "Differential Direct Sequence Spread Spectrum for Ultra-Wideband Low Power Wireless Microsystems", University of New Mexico, Dept. of EECE, Albuquerque, NM, USA.	
ms		DAVID WRIGHT & RYAN WINFIELD-WOODINGS, An efficient 2.4 - GHz wireless net for less, EE Times, October 31, 2003, 3 pages.	
ms		SIEMENS & TEXAS INSTRUMENTS, Generalised Hierarchical Golay Sequence for PSC with low complexity correlation using pruned efficient Golay correlators, 6 pages.	
ms		ANUJ BATRA ET AL. & TEXAS INSTRUMENTS ET AL., Multi-band OFDM Physical Layer Proposal for IEEE 802.15 Task Group 3a. July 21, 2003, 71 pages.	
ms		DAVID CYPHER, Coexistence, Interoperability and Other Terms, September 2000, 18 pages.	

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